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Amendments to the Claims

The listing of claims will replace all prior versions, and listing of the claims:

Listing of Claims

1. (Currently Amended) A moving image distribution system for distributing a prespecified moving image to a user terminal connected to the system via a network such as the Internet, said system comprising:

a moving image ~~distributing~~ dividing unit for ~~distributing~~ dividing said moving image ~~to~~ into two not-reproducible moving image files along the time axis;

an encrypting unit for ~~encoding~~ encrypting either one of the divided moving image files based on ~~together with~~ data for a CM file including a prespecified CM (advertisement) element incorporated therein;

a moving image distributing unit for distributing to the user terminal either one of the moving image files produced by said encrypting unit together with the CM file in response to a request for reproduction from the user terminal previously storing therein either another one of the divided moving image files; and

a reproducing unit for ~~combining~~ decrypting the two moving image files ~~and the CM file~~ distributed to the user terminal based on the data of the CM file and reproducing the ~~combined~~ decrypted files.

2. (Currently Amended) A moving image distribution system for distributing a prespecified moving image to a user terminal connected to the system via a network such as the Internet,

said system having a service provider server comprising a moving image ~~diving~~ dividing unit for dividing said moving image ~~to~~ into two ~~not-reproducing~~ not-reproducible moving image files along

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the time axis, namely a main ~~one~~ <u>moving image file</u> and a slave ~~one~~ <u>moving image file</u>; a main moving image file storing section for storing therein said main moving image file; a slave moving image file storing section for storing therein said slave moving image <u>file</u>; a CM file storing section for storing therein a CM file including a prespecified CM element incorporated therein; and an encrypting unit for encrypting either one of said main moving image file and said slave moving image file based on ~~the~~ data ~~for~~ <u>of</u> the CM file,

~~said system further comprising:~~

~~a first step of sending a demand for distributing said moving image from the user terminal to said service provider server;~~

~~a second step of acquiring, in response to the demand for distribution, said main moving image file for said moving image from said main moving image file storing section and distributing the main moving image file to the user terminal;~~

~~a third step of sending a demand for reproduction of said main moving image file from said user terminal;~~

~~a fourth step of acquiring, in response to said demand for reproduction, said slave moving image file matching said main moving image file from said slave moving image file storing section;~~

~~a fifth step of acquiring said CM file from said CM file storing section and encrypting said slave moving image file based on data in said CM file;~~

~~a sixth step of distributing said encrypted slave moving image file together with said CM file to said user terminal; and~~

~~a seventh step of combining the two moving image files distributed to said user terminal and the CM file with a prespecified reproducing unit and reproducing the combined files.~~

<u>wherein said service provider server receives a demand for distributing said moving image from said user terminal, summons said main moving image file corresponding to said moving image from said</u>

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main moving image file storing section, and distributes said main moving image file to the user terminal,

said service provider server receives a demand for reproducing said main moving image file from said user terminal, summons said slave moving image file corresponding to said main moving image file and said CM file from said slave moving image file storing section and said CM file storing section, encrypts said slave moving image file based on the data of said CM file, and distributes the encrypted slave moving image file to said user terminal together with said CM file, and

said user terminal decrypts two of said distributed moving image files and said CM file with a prespecified reproducing unit and reproduces said moving image files.

3. (Currently Amended) A moving image distribution system for distributing a prespecified moving image to a user terminal connected to the system via a network such as the Internet, said system comprising:

~~a service provider server comprising~~

a moving image contents provider server having said moving image,

a sponsor server having a CM file with a prespecified advertisement element ~~incorporated~~ therein, and

a service provider server having a moving image dividing unit for dividing said moving image ~~to~~ into two not-reproducible moving image files, namely a main ~~one~~ moving image file and a slave ~~one~~ moving image file, along the time axis,

said moving image contents provider server having a main moving image file storing section for storing ~~a~~ the main moving image file obtained after division by said moving image dividing unit,

said service provider server having a slave moving image file storing section for storing ~~thereon~~ therein ~~a~~ the slave moving image

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file obtained after division by said moving image dividing unit, an
encrypting unit for encrypting either one of said main moving image
file and said slave moving image file based on data for said CM file,
and a CM file storing section for storing therein said CM moving
image distributed from the sponsor server,

said system further comprising:

a first step of sending a demand for distributing said moving
image from the user terminal to said moving image contents provider
server;

a second step of acquiring, in response to the demand for
distribution, said main moving image file for said moving image from
said main moving image file storing section and distributing the
main moving image file to the user terminal;

a third step of sending a demand for reproduction of said main
moving image file from said user terminal;

a fourth step of acquiring, in response to said demand for
reproduction, said slave moving image file matching said main moving
image file from said slave moving image file storing section of the
service provider server;

a fifth step of acquiring said CM file from said CM file
storing section and encrypting said slave moving image file based on
data in said CM file via said encrypting unit;

a sixth step of distributing said encrypted slave moving image file
together with said CM file to said user terminal; and

a seventh step of combining the two moving image files
distributed to said user terminal and the CM file with a
prespecified reproducing unit and reproducing the combined files.

wherein said moving image contents provider server receives a
demand for transmitting said moving image from said user terminal,
summons said main moving image file corresponding to said moving
image from said main moving image file storing section, and
distributes said main moving image file to said user terminal,

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said service provider server receives a demand for reproducing said main moving image file from said user terminal and summons said slave moving image file corresponding to said main moving image file and said CM file from said slave moving image file storing section of said service provider server and said CM file storing section, and said service provider further encrypts said slave moving image file through said encrypting unit based on the data thereof, and distributes the encrypted slave moving image file to said user terminal together with said CM file, and

said user terminal decrypts two of the distributed moving image files and said CM file by a prespecified reproducing unit and reproduces said moving image files.

4.   (Currently Amended) The moving image distribution system according to claim 1, wherein said moving image dividing unit compresses data for ~~a~~ the moving image file so that a total of file capacities of the two moving image files is smaller than a file capacity for the moving image, and also ~~dividing~~ divides the moving image so that a file capacity of said main moving image file is larger than that of said slave moving image file.

5.   (Currently Amended) The moving image distribution system according to claim 1, wherein said encrypting unit computes an exclusive logical sum (XOR) ~~between~~ of a data bit array for said CM file and a data bit array for said divided moving image file and encrypts for encrypting said moving image file.

6.   (Currently Amended) The moving image distribution system according to claim 1 further comprising:
a user information storing section for storing therein various types of user information concerning users including service

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providers (managers), users, moving image contents providers, and sponsors; and

a user certifying engine for certifying access to said service provider server based on said user information, wherein said moving image dividing unit acknowledges a demand for dividing said moving image only when a user is authenticated as ~~a~~ the service provider or ~~a~~ the moving image contents provider by said user certifying engine.

7. (Currently Amended) The moving image distribution system according to claim 2, wherein said service provider server furthermore comprises a CM file ~~acquiring~~ summoning unit for ~~acquiring~~ summoning said CM file from said CM file storing section based on said user information, and said CM file ~~acquiring~~ summoning unit selects a CM file demanded by the user from the CM file storing section based on the user information and provides the CM file to said encrypting unit.

8. (Currently Amended) The moving image ~~dividing~~ distribution system according to claim 1, wherein said reproducing unit comprises a decoder for decoding said main moving image file and said slave moving image file both not-reproducible to said reproducible moving image, and a ~~combining~~ decrypting unit for ~~combining~~ decrypting one of said encrypted moving image files (slave moving image file) together with the CM file again by executing the exclusive logical sum (XOR) processing, and

said reproducing unit ~~combines~~ encrypts said CM file ~~with~~ and said moving image files by said ~~combining~~ encrypting unit after checking that the said CM file has been reproduced, and starts up said decoder to decode said main moving image file and said slave moving image file to said reproducible moving image.

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9. (Currently Amended) The moving image distribution system according to claim 8, wherein said service provider server comprises a reproducing unit storing section for storing therein said reproducing unit, and executes a processing procedure comprising a searching step of searching, when a demand for reproduction of said main moving image file is received from said user terminal, whether said reproducing unit is present on said user terminal or not, and a reproducing unit distributing step of distributing said reproducing unit is distributed to said user terminal when it is determined in the searching step that there is no reproducing unit on said user terminal.

10. (Currently Amended) The moving image distribution system according to claim 8, wherein said reproducing unit further comprises a user information storing section for storing therein user information concerning said user, and distributes said user information to said user information storing section in said service provider server in response to a demand from said an user certifying engine.

11. (Currently Amended) A moving image distribution program for a moving image distribution system to distribute distributing a prespecified moving image to a user terminal connected to a moving image distribution system via a network line such as the Internet, said program comprising:

a moving image dividing step of dividing said moving image to into two not-reproducible moving image files along the time axis;

an encrypting step of encrypting either one of said divided two moving image files based on data for a CM file including a prespecified CM element incorporated therein; and

a moving image distributing step of distributing, in response to a demand for reproduction from said user terminal previously

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storing therein either another one of the moving image files, the other one of said moving image files together with said CM ~~moving image~~ file to said user terminal, and

a reproducing step for decrypting and reproducing said two moving image files distributed to said user terminal based on data of said CM file.

12. (Currently Amended) A moving image dividing system comprising: a moving image dividing unit for dividing a reproducible moving image ~~to~~ into two not-reproducible moving image files, namely a main moving image file ~~one~~ and a slave moving image file ~~one~~, along the time axis,

wherein said moving image dividing unit comprises:

a frame dividing unit for acquiring said moving image frame by frame and dividing each of said frames ~~to~~ into a first frame including only frame information for the frame, and a second frame including said frame information and frame information for a preceding frame;

a bit dividing unit for dividing said first frame ~~to~~ into lower 7 bits and a top bit;

~~another~~ a code dividing unit for dividing said second frame ~~to~~ into a first code including only ~~the~~ second frame information, and a second code including the second frame information and frame information for a preceding frame;

a coefficient extracting unit for subjecting said first code to discrete cosine transform to extract an AC coefficient and a DC coefficient thereof, respectively; and

a file constructing section for constructing said main moving image file by combining said second code, said AC coefficient, and the lower 7 bits of said first frame and also for constructing said slave moving image file by combining said DC coefficient and the top bit of said first frame.

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13. (Currently Amended) A moving image distribution system for distributing a prespecified moving image to a user terminal connected to the system via a network such as the Internet, said system comprising: a service provider server ~~having~~, wherein said service provider server comprises:

a moving image dividing unit for dividing a moving image distributed from a moving image contents provider ~~to~~ into two not-reproducible moving image files, namely a main moving image file ~~one~~ and a slave moving image file ~~one~~, along the time axis, ~~and also for incorporating~~

an encrypting unit for encrypting either one of the divided moving image files by said moving image dividing unit based on a CM file distributed from a sponsor ~~in either one of the divided moving image files~~, and

a moving image distributing unit for distributing either one of the encrypted moving image files by said encrypting unit to said user terminal together with said CM file,

wherein said server provider server distributes said moving image file with said CM file to said user terminal and also presents a CM advertisement fee associated with distribution of said moving image file to said sponsor.

14. (Currently Amended) A moving image distribution system for distributing a prespecified moving image to a user terminal connected to the system via a network such as the Internet, said system comprising:

a moving image contents provider server storing therein said moving image;

a sponsor server storing therein a CM file ~~having a CM file~~ with a prespecified advertisement element ~~incorporated~~ therein; and

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a ~~serve~~ <u>service</u> provider server having<u>:</u> a moving image dividing unit for dividing said moving image ~~to~~ <u>into</u> two not-reproducible moving image files, namely a main <u>moving image file</u> ~~one~~ and a slave <u>moving image file</u> ~~one~~, along the time axis<u>; and an encrypting unit for encrypting either one of the divided moving image files by said moving image dividing unit based on said CM file distributed from said sponsor; and a moving image distributing unit for distributing said either one of the encrypted moving image files by said encrypting unit to said user terminal together with said CM file,</u>

wherein said service provider server ~~has~~ <u>further comprises</u> a CM management engine including<u>:</u> a counting section for counting <u>number of</u> times of distribution of either one or both of said main and slave moving image files; a CM distribution managing section for managing log data for distribution of said CM file distributed together with said moving image file; and a CM information preparing section for computing distribution information for said CM file according to <u>the number of</u> times of distribution of said CM file and the distribution log data; <u>and</u>

~~said system furthermore comprising:~~

~~a counting step of counting~~ <u>said counting section counts the number of</u> times of distribution of said distributed moving image contents in response to a demand for distribution from said user terminal ~~on said counting section; a CM information preparing step of preparing acquiring~~ <u>said CM information preparing section summons</u> ~~a count~~ <u>the number of times of counting</u> from said counting section, ~~acquiring said log data for distribution~~ <u>and said distribution data</u> from said CM distribution managing section <u>at the same time,</u> and ~~preparing~~ <u>prepares</u> CM distribution information from said <u>number of times of</u> ~~count~~ <u>counting</u> ~~as well as from log for distribution~~ <u>and the</u> distribution data ~~in said CM information preparing section~~ <u>and notifies said moving image contents provider and/or said sponsor server of said CM distribution information</u>~~, and~~

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~~a distribution log data notifying step of notifying to said moving image contents provider server and/or said sponsor server of said distribution information~~.

15. (Currently Amended) A moving image dividing program for ~~having~~ a moving image dividing ~~step of~~ system to divide ~~dividing~~ a reproducible moving image ~~to~~ into two not-reproducible moving image files, namely a main moving image file ~~one~~ and a slave moving image file ~~one~~, along the time axis,

wherein said moving image dividing program executes ~~step comprises~~ steps comprising: a frame dividing step of acquiring said moving image frame by frame and dividing each frame ~~to~~ into a first frame including only ~~the~~ frame information thereof and a second frame including said frame information and frame information concerning a preceding frame;

a bit dividing step of dividing said first frame ~~to~~ into lower 7 bits and a top bit;

a code dividing ~~bit~~ step of dividing said second frame ~~to~~ into a first code including only the second frame information and a second code including the second frame information and frame information concerning a preceding frame;

a coefficient extracting step of subjecting said first code to discrete cosine transform to extract an AC coefficient and a DC coefficient thereof, respectively; and

a file constructing step of constructing said main moving image file by combining said second code, said ac coefficient, and the lower 7 bits of said first frame, and also of constructing said slave moving image file by combining said DC coefficient and atop bit of said first frame.

16. (Currently Amended) A moving image dividing system having a moving image dividing unit for dividing a reproducible moving image

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~~to~~ into two not-reproducible moving image files, namely a main moving image file ~~one~~ and a slave moving image file ~~one~~, along the time axis,

wherein said moving image dividing unit comprises:

a frame dividing unit for acquiring said moving image frame by frame and dividing each frame ~~to~~ into a first frame including only ~~the~~ frame information thereof and a second frame including the frame information and frame information concerning a preceding frame;

a first block extracting unit for extracting a block from said first frame;

a first coefficient extracting section for extracting a DC coefficient and an AC coefficient from the block extracted by said first block extracting unit;

a second block extracting unit for extracting a block from said second frame;

a second coefficient extracting section for acquiring a DC coefficient and an AC coefficient from the block extracted by said second block extracting unit;

a filtering section for acquiring a portion of the bit number as a filter factor by ~~subjecting~~ executing an exclusive logical sum (XOR) processing on a DC coefficient for the preceding frame extracted from each coefficient extracting section ~~to the exclusive logical sum (XOR) processing~~;

a first file constructing section for ~~subjecting~~ executing the exclusive logical sum (XOR) processing on the AC coefficient extracted by said first coefficient extracting section and the filter factor produced by said filtering section ~~to the exclusive logical sum (XOR) processing~~; and

a second file constructing section for ~~subjecting~~ executing the exclusive logical sum (XOR) processing on the AC coefficient extracted by said second coefficient extracting section and the

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filter factor produced by said filtering section ~~to the exclusive logical sum (XOR) processing~~.

17. (Original) The moving image dividing system according to claim 14, wherein said filter factor comprises lower 8 bits.

18. (Currently Amended) A moving image dividing program having a moving image dividing ~~step of~~ system for dividing a reproducible moving image ~~to~~ into two not-reproducible moving image files, namely a main <u>moving image file</u> ~~one~~ and a slave <u>moving image file</u> ~~one~~, along the time axis,
    wherein said moving image dividing ~~unit~~ <u>system executes steps comprising</u> ~~comprises~~:
    a frame dividing step of acquiring said moving image ~~frame~~ by frame and dividing each frame ~~to~~ <u>into</u> a first frame including only ~~the~~ frame information <u>thereof</u> and a second frame including said frame information and frame information concerning a preceding frame;
    a first block extracting step of extracting a block from said first frame;
    a first coefficient extracting step of extracting a DC coefficient and an AC coefficient from the block extracted in the first block extracting step;
    a second block extracting step of extracting a block from said second frame;
    a second coefficient extracting step of extracting a DC coefficient and an AC coefficient from the block extracted in the second block extracting step;
    a filtering step of acquiring a portion of the bit number as a filter factor by subjecting a DC coefficient for the preceding frame extracted from each coefficient extracting <u>step</u> ~~section~~ to the exclusive logical sum (XOR) processing;

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a first file constructing step of subjecting the AC coefficient extracted in the first coefficient extracting step and the filter coefficient produced in the filtering step to the exclusive logical sum (XOR) processing; and

a second file constructing step of subjecting the AC coefficient extracted in said second coefficient extracting step and the filter factor produced in said filtering step to the exclusive logical sum (XOR) processing.

19. (Currently amended) A recording medium with the moving image distribution program according to claim 12 and/or the moving image dividing program according to claim 13 or 16 ~~recorded~~ <u>described</u> therein.